# UFO'S & THE U.S. AIR FORCE

The following document is taken verbatim from the United States Air Forces Academy textbook, "Introductory Space Science, V olume II, Department of Physics, USAF." This is the volume that was being used by the Air Force Academy, at Colorado Springs, Colorado. The Air Force Academy has since pulled this volume from the curriculum in the early '70s, because of the controversy it generated.

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**CHAPTER XIII** 

### UNIDENTIFIED FLYING OBJECTS

What is an Unidentified Flying Object (UFO)?

Well, according to United States Air Force Regulation 80-17 (dated 19 September 1966), a UFO is "Any" aerial phenomenon or object which is unknown or appears to be out of the ordinary to the observer. "

This is a very broad definition which applies equally well to one individual seeing his first noctilucent cloud at twilight as it does to another individual seeing his first helicopter. However, at present most people consider the term UFO to mean an object which behaves in a strange or erratic manner while moving through the Earth's atmosphere. That strange phenomenon has evoked strong emotions and great curiosity among a large segment of our world's population. The average person is interested because he loves a mystery, the professional military man is involved because of the possible threat to national security, and some scientists are inter-

ested because of the basic curiosity that led them into becoming researchers.

The literature on UFO's is so vast, and the stories so many and varied, that we can only present a sketchy outline of the subject in this chapter. That outline includes description classifications, operational domains (temporal and spatial), some theories as to the nature of the UFO phenomenon, human reactions, attempts to attack the problem scientifically, and some tentative conclusions. If you wish to read further in this area, the references provide an excellent starting point.

# 33. 1 - DESCRIPTIONS

One of the greatest problems you encounter when attempting to catalog UFO sightings, is selection of a system for cataloging. No effective system has yet been devised, although a number of different systems have been proposed. The net result is that almost all UFO data are either treated in the form of individual cases, or in the forms of inadequate qualification systems. However, these systems do tend to have some common factors, and a collection of these factors is as follows:

[a] Size; [b] Shape (disc, ellipse, football, etc); [c]. Luminosity; [d] Color; [e] Number of UFO's.

## **Behavior:**

[a] Location (altitude, direction, etc); [b].Patterns of paths (straight line, climbing, zig-zagging, etc); [c] Flight Characteristics (wobbling, fluttering, etc) [d] Periodicity of sightings; [e] Time duration; [f] Curiosity or inquisitiveness; [g].Avoidance; [h] Hostility

### **Associated Effects:**

[a] Electro-Magnetic (compass, radio, ignition systems, etc); [b] Radiation (burns, induced radioactivity, etc); [c].Ground disturbance (dust stirred up, leaves moved, standing wave peaks of surface of water, etc); [d].Sound (none, hissing, humming, roaring, thunderclaps, etc); [e].Vibration (weak, strong, slow, fast); [f].Smell (ozone or other odor); [g].Flame (how much, where, when, color); [h].Smoke or cloud (amount, color, persistence); [i].Debris (type, amount, color, persistence); [j].Inhibition of voluntary movement by observers; [k].Sighting of "creatures" or "beings":

# **AFTER EFFECTS:**

[a] Burned areas or animals; [b] depressed or flattened areas; [c] Dead or "missing animals"; [d] Mentally disturbed people; [e].Missing items:

We make no attempt here to present available data in terms of the foregoing descriptors.

# **USAF & UFO's**

# 33. 2 - OPERATIONAL DOMAINS TEMPORAL AND SPATIAL

We will present evidence that UFO's are a global phenomenon which may have persisted for many thousands of years. During this discussion, please remember that the more ancient the reports the less sophisticated the observer. Not only were the ancient observers lacking the terminology necessary to describe complex devices (such as present day helicopters) but they were also lacking the concepts necessary to understand the true nature of such things as television, spaceships, rockets, nuclear weapons and radiation effects. To some, the most advanced technological concept was a war chariot with knife blades attached to the wheels. By the same token, the very lack of accurate terminology and descriptions leaves the more ancient reports open to considerable misinterpretation, and present evaluations of individual reports may well be completely wrong. Nevertheless, let us start with an intriguing story in one of the oldest chronicles of India - the Book of Dzyan.

The book is a group of "story-teller" legends which were finally gathered in manuscript form when man learned to write. One of the stories is of a small group of beings who supposedly came to Earth many thousands of years ago in a metal craft which orbited the Earth several times before landing. As told in the Book "These beings lived on Earth while largely keeping to themselves and were revered by the humans among whom they had settled. But eventually differences arose among them and they divided their numbers, several of the men and women and some children settled in another city, where they were promptly installed as rulers by the awestricken populace.

"Separation did not bring peace to these people and finally their anger reached a point where the ruler of the original city took with him a small number of his warriors and they rose into the air in a huge shining metal vessel. While they were many leagues from the city of their enemies, they launched a great shining lance that rode on a beam of light. It burst apart in the city of their enemies with a great ball of flame that shot up to the heavens, almost to the stars. All those who were in the city were horribly burned and even those who were not in the city - but nearby - were burned also. Those who looked upon the lance and the ball of fire were blinded forever afterward. Those who entered the city on foot became ill and died. Even the dust of the city was poisoned, as were the rivers that flowed through it. Men dared not go near it, and it gradually crumbled into dust and was forgotten by men. "

"When the leader saw what he had done to his own people he retired to his palace and refused to see anyone. Then he gathered about him those warriors who remained, and their wives and children, and they entered their vessels and rose one by one into the sky and sailed away. Nor did they return."

Could this foregoing legend really be an account of an extrater-restrial colonization, complete with guided missile, nuclear warhead and radiation effects? It is difficult to assess the validity of that explanation - just as it is difficult to explain why Greek, Roman and Nordic Mythology all discuss wars among their "Gods". (Even the Bible records conflict between the legions of God and Satan.) Could it be that each group recorded their parochial view of what was actually a global conflict among alien colonists or visitors? Or is it that man has led such a violent existence that he expects conflict and violence among even his gods?

Evidence of perhaps an even earlier possible contact was uncovered by Tschi Pen Lao of the University of Peking. He discovered astonishing carvings in granite on a mountain in Hunan Province and on an island in Lake Tungting. These carvings have been evaluated as 47,000 years old, and they show people with large trunks (breathing apparatus?) or "elephant" heads shown on human bodies? (Remember, the Egyptians often represented their gods as animal heads on human bodies).

Only 8,000 years ago, rocks were sculpted in the Tassili plateau of Sahara, depicting what appeared to be human beings but with strange round heads (helmets? or "sun" heads on human bodies?) And even more recently, in the Bible, Genesis (6:4) tells of angels from the sky mating with women of Earth, who bore them children. Genesis 19:3 tells of Lot meeting two angels in the desert and his later feeding them at his house. The Bible also tells a rather unusual story of Ezekiel who witnessed what has been interpreted by some to have been a spacecraft or aircraft landing near the Chebar River in Chaldea (593 BC).

Even the Irish have recorded strange visitations. In the Speculum Regali in Konungs Skuggsa (and other accounts of the era about 956 AD) are numerous stories of "demonships" in the skies. In one case a rope from one such ship became entangled with part of a church. A man from the ship climbed down the rope to free it, but was seized by the townspeople. The Bishop made the people release the man, who climbed back to the ship, where the crew cut the rope and the ship rose and sailed out of sight. In all of his actions, the climbing man appeared as if he were swimming in water. Stories such as this makes one wonder if the legends of the "little people" of Ireland were based upon imagination alone.

About the same time, in Lyons (France) three men and a women supposedly descended from an airship or spaceship and were captured by a mob. These foreigners admitted to being wizards, and were killed. (No mention is made of the methods employed to extract the admissions.) Many documented UFO sightings occurred throughout the Middle Ages, including an especially startling one of a UFO over London on 16 December 1742. However, we do not have room to include any more of the Middle Ages sightings. Instead, two "more-recent" sightings are contained in this section to bring us up to modern times.

In a sworn statement dated 21 April 1897, a prosperous and prominent farmer named Alexander Hamilton (Le Roy, Kansas, USA) told of an attack upon his cattle at about 10:30 PM the previous Monday. He, his son, and his tenant grabbed axes and ran some 700 feet from the house to the cow lot where a great cigarshaped ship about 300 feet long floated some 30 feet above his cattle. It had a carriage underneath which was brightly lighted within (dirigible and gondola?) and which had numerous windows. Inside were six strange looking beings jabbering in a foreign language. These beings suddenly became aware of Hamilton and the others. They immediately turned a searchlight on the farmer, and also turned on some power which sped up a turbine wheel (about 30 ft diameter) located under the craft. The ship rose, taking with it a two-year old heifer which was roped about the neck by a cable of one-half inch thick, red material. The next day a neighbor, Link Thomas, found the animal's hide, legs and head in his field. He was mystified at how the remains got to where they were because of the lack of tracks in the soft soil. Alexander Hamilton's sworn statement was accompanied by an affidavit as to his veracity. The affidavit was signed by ten of the local leading citizens.

# **USAF & UFO's**

On the evening of 4 November 1957 at Fort Itaipu, Brazil, two sentries noted a "new star" in the sky. The "star" grew in size and within seconds stopped over the fort. It drifted slowly downward, was as large as a big aircraft, and was surrounded by a strong orange glow. A distinct humming sound was heard, and then the heat struck. A Sentry collapsed almost immediately, the other managed to slide to shelter under the heavy cannons where his loud cries awoke the garrison. While the troops were scrambling towards their battle stations, complete electrical failure occurred. There was panic until the lights came back on but a number of men still managed to see an orange glow leaving the area at high speed. Both sentries were found badly burned - one unconscious and the other incoherent, suffering from deep shock.

Thus, UFO sightings not only appear to extend back to 47,000 years through time but also are global in nature. One has the feeling that this phenomenon deserves some sort of valid scientific investigation, even if it is a low level effort.

# 33. 3 - SOME THEORIES AS TO THE NATURE OF THE UFO PHENOMENON

There are few cohesive theories as to the nature of UFO's. Those theories that have been advanced can be collected in five groups:
[a] Mysticism; [b] Hoaxes and rantings due to unstable persons;
[c] Secret Weapons; [d] Natural Phenomena; [e] Alien visitors:

# [a] - Mysticism

It is believed by some cults that the mission of UFO's and their crews is a spiritual one, and that all materialistic efforts to determine the UFO's nature are doomed to failure.

# [b] - Hoaxes and Rantings due to Unstable Persons

Some have suggested that all UFO reports were the results of pranks and hoaxes, or were made by people with unstable personalities. This attitude was particularly prevalent during the time period when the Air Force investigation was being operated under the code name of Project Grudge. A few airlines even went as far as to ground every pilot who reported seeing a "flying saucer". The only way for the pilot to regain flight status was to undergo a psychiatric examination. There was a noticeable decline in pilot reports during this time interval, and a few interpreted this decline to prove that UFO's were either hoaxes or the result of unstable personalities. It is of interest that NICAP (The National Investigations Committee on Aerial Phenomena) even today still receives reports from commercial pilots who neglect to notify either the Air Force or their own airline.

There are a number of cases which indicate that not all reports fall in the hoax category. We will examine one such case now. It is the Socorro, New Mexico sighting made by police Sergeant Lonnie Zamora. Sergeant Zamora was patrolling the streets of Socorro on 24 April 1964 when he saw a shiny object drift down into an area of gullies on the edge of town. He also heard a loud roaring noise which sounded as if an old dynamite shed located out that way had exploded. He immediately radioed police headquarters, and drove out toward the shed. Zamora was forced to stop about 150 yards away from a deep gully in which there appeared to be an overturned car. He radioed that he was investigating a possible wreck, and then worked his car up onto the mesa and over toward the edge

of the gully. He parked short, and when he walked the final few feet to the edge, he was amazed to see that it was not a car but instead was a weird eggshaped object about fifteen feet long, white in color and resting on short, metal legs. Beside it, unaware of his presence were two humanoids dressed in silvery coveralls. They seemed to be working on a portion of the underside of the object. Zamora was still standing there, surprised, when they suddenly noticed him and dove out of sight around the object. Zamora also headed the other way, back toward his car. He glanced back at the object just as a bright blue flame shot down from the underside. Within seconds the eggshaped thing rose out of the gully with "an earsplitting roar. "The object was out of sight over the nearby mountains almost immediately, and Sergeant Zamora was moving the opposite direction almost as fast when he met Sergeant Sam Chavez who was responding to Zamora's earlier radio calls. Together they investigated the gully and found the bushes charred and still smoking where the blue flame had jetted down on them. About the charred area were four deep marks where the metal legs had been. Each mark was three and one half inches deep, and was circular in shape. The sand in the gully was very hard packed so no sign of the humanoids' footprints could be found. An official investigation was launched that same day, and all data obtained supported the stories of Zamora and Chavez. It is rather difficult to label this episode a hoax, and it is also doubtful that both Zamora and Chavez shared portions of the same hallucination.

# [c] - Secret Weapons

A few individuals have proposed that UFO's are actually advanced weapon systems, and that their natures must not be revealed. Very few people accept this as a credible suggestion.

# [d] - Natural Phenomena

It has also been suggested that at least some, and possibly all of the UFO cases were just mis-interpreted manifestations of natural phenomena. Undoubtedly this suggestion has some merit. People have reported, as UFO's, objects which were conclusively proven to be balloons (weather and skyhook), the planet Venus, man-made artificial satellites, normal aircraft, unusual cloud formations, and lights from ceilometers (equipment projecting light beams on cloud bases to determine the height of the aircraft visual ceiling). It is also suspected that people have reported mirages, optical illusions, swamp gas and ball lightning (a poorly-understood discharge of electrical energy in a spheroidal or ellipsoidal shape. . . some charges have lasted for up to fifteen minutes but the ball is usually no bigger than a large orange). But it is difficult to tell a swamp dweller that the strange, fast-moving light he saw in the sky was swamp gas; and it is just as difficult to tell a farmer that a bright UFO in the sky is the same ball lightning that he has seen rolling along his fence wires in dry weather. Thus accidental misidentification of what might well be natural phenomena breeds mistrust and disbelief; it leads to the hasty conclusion that the truth is deliberately not being told. One last suggestion of interest has been made, that the UFO's were plasmoids from space.- concentrated blobs of solar wind that succeeded in reaching the surface of the Earth. Somehow this last suggestion does not seem to be very plausible; perhaps because it ignores such things as penetration of Earth's magnetic field.

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